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AMENDING THE RECLAMATION SAFETY OF DAMS ACT OF 1978

AUGUST 19 (legislative day, AUGUST 17), 1982.—Ordered to be printed

Mr. MURKOWSKI, from the Committee on Energy and Natural Resources, submitted the following

REPORT

[To accompany S. 956]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 956) to amend the Reclamation Safety of Dams Act of 1978 to authorize additional appropriations, and for other purposes, having considered the same, reports favorably thereon with an amendment in the nature of substitute and recommends that the bill as amended do pass.

The amendment is as follows:

Page 1, line 3, strike all after the enacting clause and insert the following:

That the Reclamation Safety of Dams Act of 1978 (92 Stat. 2471, 43 U.S.C. 506, et seq.) is amended as follows:

1. In Section 2, following "modifications" insert "or replacement".

2. In Section 4, wherever the word "modification" appears insert thereafter "or replacement".

3. In Section 5: (a) in the first sentence after "$100,000,000" delete the comma and insert "and, effective October 1, 1983, not to exceed an additional $550,000,000,"; change "construction to modify an existing dam" to read "construction to modify or replace an existing dam"; and delete the period at the end of the proviso by inserting a colon and the following additional proviso: "*Provided further*, That such obligation may be made prior to the expiration of such sixty days in any case in which the respective Committee of jurisdiction in the House of Representatives and the Senate approve an earlier date and notifies the Secretary in writing, of such approval." and (b) in the second and third sentences wherever the words "modification or modifications" appear insert thereafter "or replacement".

4. Following Section 11, insert the following new Section 12:

SEC. 12. Included within the Scope of this Act are Fish Lake, Four Mile, Ochoco, Savage Rapids Diversion and Warm Springs Dams, Oregon; Como Dam, Montana; Little Wood River Dam, Idaho; Twin Buttes Dam, Texas; Foss Dam, Oklahoma and related facilities; *Provided*, That the cost of foundation treatment, drainage, and instrumentation work planned or underway at Twin Buttes Dam, Texas, and Foss Dam, Oklahoma, shall be nonreimbursable and nonreturnable under Federal Reclamation laws.

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Purpose

As ordered reported, S. 956 would authorize the appropriation of and additional $550 million for dam safety purposes, provide authority to construct replacement dams, allow for waiver of the sixty day waiting period prior to obligation of funds, and extend coverage of the act to certain dams.

Background and Need

The Act of November 2, 1978 (Public Law 95–578) authorized the appropriation of $100 million to the Secretary of the Interior for purposes of a safety of dams program for the Bureau of Reclamation and established the parameters under which the Secretary was authorized to construct, operate, and maintain new or modified features at existing Federal reclamation dams for safety of dams purposes. Recent events of the time (the Rapid City, South Dakota flood and the failure of the Bureau's Teton Dam in Idaho) had focused concern upon the hazards presented by floods and the failure of dams or related structures.

Traditionally, the Bureau of Reclamation had maintained a formal program of inspection under its Examination of Existing Structures Program of the facilities related to the 333 reservoir impoundments under the Bureau's jurisdiction. Major modifications of dams for safety purposes had been authorized by Congress on a case-by-case basis; each project considered in a separate authorizing bill. The 1978 Safety of Dams Act provided the Secretary with permanent authority to undertake safety of dams modifications rather than having to come to the Congress for each project. However, the Act was specific that the funds were to be used only for safety purposes and not for providing additional water storage capacity or the development of benefits above those provided by the original structures. Costs of the program which resulted from age and normal deterioration of structures or from nonperformance of reasonable and normal maintenance were to be treated as project costs and reimbursable by project participants in accordance with existing law.

Since initiation of the program, estimated costs of dam safety activities have increased as a result of inflation and also the discovery of additional safety problems which need to be addressed. During the hearings on S. 956, the Administration testified that in addition to the thirteen dams identified at the outset of the program in 1978, an additional thirty-five dams have been identified as needing safety related work. The current authorization of $100 million is inadequate to fund the additional work which is estimated to cost in excess of $500 million. An increase in the authorization for the program of an additional $550 million will permit dam safety activities at the newly identified projects as well as allow for the increase in costs due to inflation.

Legislative History

S. 956 was introduced on April 9, 1981 by Senators DeConcini, Goldwater, and Wallop. A field hearing was held by the Subcommittee on Water and Power on March 27, 1982 in Phoenix, Arizona. A

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Washington, D.C. hearing was held before the Subcommittee on April 22, 1982.

A companion measure, H.R. 3208, was introduced in the House on April 9, 1981, by Congressmen Udall, Rhodes, Rudd, and Stump. A hearing was held before the Subcommittee on Water and Power Resources of the House Committee on Interior and Insular Affairs on January 26, 1982. The bill was subsequently reported on April 1, 1982 and passed by the House on April 29, 1982. H.R. 3208 is presently before the Senate Committee on Energy and Natural Resources.

Committee Recommendation and Tabulation of Votes

The Senate Committee on Energy and Natural Resources, in open business session on August 18, 1982, by unanimous vote of a quorum present recommends that the Senate pass S. 956 if amended as described herein.

The rollcall vote on the measure was 14 yeas, 0 nays as follows:

YEAS	NAYS
Mr. McClure	
Mr. Hatfield [1]	
Mr. Domenici	
Mr. Wallop	
Mr. Warner	
Mr. Humphrey	
Mr. Murkowski	
Mr. Nickles	
Mr. East [1]	
Mr. Heinz	
Mr. Jackson	
Mr. Bumpers	
Mr. Ford	
Mr. Melcher	

Mr. Metzenbaum requested that it be noted in the Committee report on S. 956 that he is opposed to reporting of the measure as amended.

Explanation of the Committee Amendment

The Committee struck all after the enacting clause and inserted a new text.

As amended, the bill would provide the Secretary of the Interior with the authority to replace rather than modify an existing dam for safety purposes. Testimony during the hearing on S. 956 indicated that in some instances replacement rather than modification of an existing structure might be the most cost effective method of alleviating safety hazards.

In addition to authorizing the appropriation of additional funds, the Committee also amended S. 956 to provide for waiving of the 60 day waiting period before the Secretary may obligate funds after reporting his intention to the Congress. This gives recognition to circumstances where such a waiver may be appropriate so as to allow

[1] Indicates vote by proxy.

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for taking advantage of good weather for construction or other opportunities to facilitate safety measures.

The Committee amendment also extends the Secretary's authority to perform safety modifications to several dams in the Pacific Northwest which were included in reclamation projects by Act of Congress although title has not been secured by the Federal government. In addition, the amendment would also provide that the costs of foundation treatment, drainage, and instrumentation work planned or underway at Twin Buttes Dam in Texas and Foss Dam in Oklahoma to correct construction deficiencies will be considered nonreimbursable under the Act.

Cost and Budgetary Considerations

The Congressional Budget Office estimate of the costs of this measure has been requested but was not received at the time this report was filed. When the report is available, the Chairman will request that it be printed in the Congressional Record for the advice of the Senate.

Executive Communications

The pertinent legislative report received by the Committee from the Department of the Interior setting forth Executive agency recommendations relating to S. 956 is set forth below:

U.S. Department of the Interior,
Office of the Secretary,
Washington, D.C., April 22, 1982.

Hon. James A. McClure,
Chairman, Committee on Energy and Natural Resources, U.S. Senate,
Washington, D.C.

Dear Mr. Chairman: We understand that S. 956, a bill "To amend the Reclamation Safety of Dams Act of 1978 to authorize additional appropriations, and for other purposes," is before your committee. We offer the views of the Department of the Interior for your consideration.

The Department recommends approval of S. 956 with suggested amendments.

S. 956 increases the sum authorized to be appropriated for carrying out the provisions of the Reclamation Safety of Dams Act (Act) from $100 million to $450 million.

The total estimated cost of safety of dams work proposed in Reclamation's fiscal year 1982 program is $103.7 million. In order to complete that work and to initiate other work which is currently identified, an increase in the existing $100 million appropriation ceiling is necessary. Our Safety Evaluaton of Existing Dams examinations have identified an additional 35 dams that may require safety modifications. Frequently, the identified deficiencies exist because older dams were not designed to meet current standards, cannot safely pass newly calculated maximum hydrologic events, or cannot sustain estimated maximum seismic events. Other problems are experienced where dams have reduced life due to deterioration because they were constructed using inferior materials or presently outdated construction techniques. An estimated $500 million is needed for that additional work. However,

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future refinement and analysis may require additional increases. Moreover, Congressional oversight is already provided by the modification report and annual appropriations process. Therefore it is suggested that section 1 of the bill be amended as follows:

"That Section 5 of the Reclamation Safety of Dams Act of 1978 (92 Stat. 2471) is amended to provide such sums as are necessary to carry out the provisions of this Act."

Modification reports will be prepared for congressional review as analyses are completed and the need for modification is affirmed.

To provide for full implementation of the Reclamation Safety of Dams Act, consistent with the President's program for economic recovery, we recommend four amendments to the Act.

The first is to amend the Act to modify the repayment requirements for safety-of-dams work. The Administration is committed to reducing the Federal budget and believes that beneficiaries of Federal projects should, in most cases, contribute to those projects. Our proposed amendment will provide for project beneficiary, State, and local participation in the cost of making Reclamation dams safe. We do not believe that safety costs *per se* should be exempted from reimbursement or costs haring. In fact, since the beginning of the reclamation program the cost of building a safe dam has been allocated to authorized project purposes, usually through the separable-cost-remaining-benefit method, and have been subject to reimbursement or cost sharing on the same basis as the purpose to which allocated. This is appropriate as safety considerations permeate every aspect of dam design and construction. If the dam develops defects over time or if additional work is needed to meet current safety standards, there is no reason to forego that cost sharing or reimbursement that would have been due had the remedial work been incorporated into the initial construction. The long range effects of correcting safety problems without cost sharing or reimbursement is to make all replacement of existing investment free to its users and beneficiaries, and place the total cost on the general taxpayer. Our proposal recognizes that some irrigation districts may not be sufficiently profitable to repay the total allocated cost so the reimbursement amount is limited to the ability to pay. Given the current cost advantages of Federal hydroelectric power and municipal and industrial water supplies there is no need for forgiveness for these purposes. We recommend that a new section 2 be added to the bill as follows:

SEC. 2. Section 4 of the Act is deleted and the following is substituted in lieu thereof:

"SEC. 4. (a) Costs hereafter incurred in the modification or replacement of structures under this Act shall be allocated to the current functions served by the dam, project, unit, or division, as determined by the Secretary at the time of completion of the work undertaken pursuant to this Act. Costs allocated to irrigation water service and capable of being repaid by the irrigation water users shall be reimbursed within 50 years of the year in which the work undertaken pursuant to this Act is substantially complete. Costs allocated to irrigation water service which are beyond the water users' capability to repay will be nonreimbursable. Costs allocated to recreation or fish and wildlife enhancement shall be reimbursed in accordance with the Federal Water Project Recreation Act (79 Stat. 213), as amended.

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(b) Costs allocated to the purpose of municipal, industrial, and miscellaneous water service, commercial power, and the portion of recreation and fish and wildlife enhancement costs reimbursable pursuant to the Federal Water Project Recreation Act shall be repaid within 50 years with interest. The interest rate used pursuant to this Act shall be determined by the Secreary of the Treasury, taking into consideration the average market yields on outstanding marketable obligations of the United States with approximately 5 years remaining to mautrity, during the month preceding the fiscal year in which the costs incurred for work undertaken pursuant to this Act. The interest rate so determined on the unrecovered balance shall be redetermined every 5 years to reflect the average market yield at that time on outstanding marketable obligations with approximately 5 years remaining to maturity.

"(c) The Secretary is authorized to negotiate appropriate contracts with project beneficiaries providing for the return of reimbursable costs through water charges, ad valorem taxes, account charges, or other means he deems appropriate."

The second amendment provides authority for the Secretary of the Interior to construct replacement dams in lieu of modifying existing structures when a "least cost analysis" indicates that replacement is the least expensive and most technically sound method to mitigate a hazardous situation. We have encountered situations where it would be less expensive to abandon completely the existing dam and contruct a new dam at a nearby location.

For instance, although the final determinations have not been made, early indications are that the Roosevelt Dam, Salt River Project, Arizona, would be overtopped and could fail if the newly calculated probable maximum flood were to occur. Also, occurrence of the maximum credible earthquake would probably destroy the existing dam. The appraisal grade cost estimate for modification of the dam, to withstand the occurrence of the probable maximum flood and to regulate that flood to avoid failure of the downstream dams, is approximately the same as constructing a totally new dam a quarter mile downstream on the Salt River. If the final seismic analysis verifies that the existing dam (even with the modifications to handle the probable maximum flood) will fail during the maximum credible earthquake, then additional modifications will have to be made. The additional cost of a new dam designed to withstand the maximum credible earthquake amendment which adds a new section 3 to S. 956:

In order to implement this authority we suggest the following could be much less than modification of the existing dam.

"SEC. 3. In line 2 of the preamble between the words 'dams' and 'for,' insert 'or to replace such dams'. In section 2, following the word 'modifications' insert the words 'or replacements'. In section 5, 6th line, following the word 'modify,' insert the words 'or replace'. Add the words 'or replacements' after the word 'modifications' in section 5. In section 5, the words 'or replacement' shall be inserted after the word 'modification' in lines 16, 17, and 20."

The third amendment we recommend is to revise section 5 of the Act. The Secretary of the Interior should be exempted from the modification report requirements of section 5 when safety modification costs

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are estimated to be $500,000 or less. This would relieve the Bureau of Reclamation of the costly and lengthy reporting and approval process and thus increase management efficiency on minor safety of dams modification work.

To incorporate this, we suggest the addition of a new section 4 to the bill:

"SEC. 4. Following the word 'fund' on line 5 of section 5 of the Act, insert the words 'exceeding $500,000'."

Fourth, we would provide authority to modify, for safety of dams purposes, those dams which were made a part of a Reclamation project by act of Congress. We have identified several such Reclamation project dams. Some were actually modified under the authority of project legislation, but title was never secured by the Federal Government.

We suggest that a new section 5 be added to the bill as follows:

"SEC. 5. The Act is further amended by adding a new section 12 as follows: 'SEC. 12. Included within the scope of this Act are Fish Lake, Four Mile, Ochoco, Savage Rapids Diversion and Warm Springs Dams, Oregon; Como Dam, Montana; Little Wood River Dam, Idaho and related facilities which have been made part of a Federal reclamation project by previous acts of Congress'."

The Office of Management and Budget has advised that there is no objection to the presentation of this report from the standpoint of the Administration's program.

Sincerely,

DAVID C. RUSSELL,
Acting Assistant Secretary.

REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of Rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred by the passage of S. 956.

It is the Committee's expressed opinion that the bill is not a regulatory measure in the sense of imposing Government established standards or significant responsibilities on private individuals or businesses and that little, if any, additional paperwork would result from enactment of S. 956 other than that which would be normally associated with similar Federal construction programs and activities.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, S. 956, as ordered reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

RECLAMATION SAFETY OF DAMS ACT OF 1978

(92 Stat.) 2471; 43 U.S.C. 506, et. seq.)

That this Act shall be cited as the "Reclamation Safety of Dams Act of 1978".

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SEC. 2. In order to preserve the structural safety of Bureau of Reclamation dams and related facilities the Secretary of the Interior is authorized to perform such modifications *or replacement* as he determines to be reasonably required. Said performance of work shall be in accordance with the Federal reclamation laws (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory or supplementary thereto).

SEC. 3. Construction authorized by this Act shall be for the purposes of dam safety and not for the specific purposes of providing additional conservation storage capacity or of developing benefits over and above those provided by the original dams and reservoirs. Nothing in this Act shall be construed to reduce the amount of project costs allocated to reimbursable purposes heretofore authorized.

SEC. 4. (a) Costs therefore or hereafter incurred in the modification *or replacement* of structures under this Act, the cause of which results from age and normal deterioration of the structure or from nonperformance of reasonable and normal maintenance of the structure by the operating entity shall be considered as project costs and will be allocated to the purposes for which the structure was authorized initially to be constructed and will be reimbursable as provided by existing law.

(b) Costs heretofore or hereafter incurred in the modification *or replacement* of structures under this Act, the cause of which results from new hydrologic or seismic data or changes in state-of-the-art criteria deemed necessary for safety purposes shall be nonreimbursable and nonreturnable under the Federal Reclamation law.

SEC. 5. There are hereby authorized to be appropriated for fiscal year 1979 and ensuing fiscal years such sums as may be necessary, but not to exceed $100,000,000[.] *and, effective October 1, 1983, not to exceed an additional $550,000,000,* to carry out the provisions of this Act to remain available until expended if so provided by the appropriations Act: *Provided*, That no funds shall be obligated for carrying out actual construction to modify *or replace* an existing dam under authority of this Act prior to sixty days (which sixty days shall not include days on which either the House of Representatives or the Senate is not in session because of an adjournment of more than three calendar days to a day certain) from the date that the Secretary has transmitted a report on such existing dam to the Congress[.]*: Provided further, That such obligation may be made prior to the expiration of such sixty days in any case in which the respective Committee of jurisdiction in the House of Representatives and the Senate approve an earlier date and notifies the Secretary in writing, of such approval.* The report required to be submitted by this section will consist of a finding by the Secretary of the Interior to the effect that modifications *or replacement* are required to be made to insure the safety of an existing dam. Such finding shall be accompanied by a technical report containing information on the need for structural modification *or replacement*, the corrective action deemed to be required, alternative solutions to structural modification *or replacement* that were considered, the estimated cost of needed modifications *or replacement*, and environmental impacts if any resulting from the implementation of the recommended plan of modification *or replacement.*

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Sec. 12. Included within the Scope of this Act are Fish Lake, Four Mile, Ochoco, Savage Rapids Diversion and Warm Springs Dams, Oregon; Como Dam, Montana; Little Wood River Dam, Idaho; Twin Buttes Dam, Texas; Foss Dam, Oklahoma and related facilities; Provided, That the cost of foundation treatment, drainage, and instrumentation work planned or underway at Twin Buttes Dam, Texas, and Foss Dam, Oklahoma, shall be nonreimbursable and nonreturnable under Federal Reclamation laws.

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